



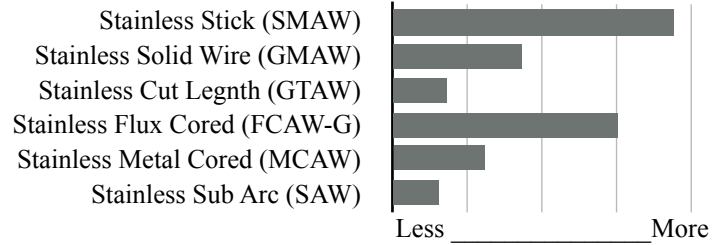
Stainless Steel Weld Process Selector Guide

Cost Per Kilogram



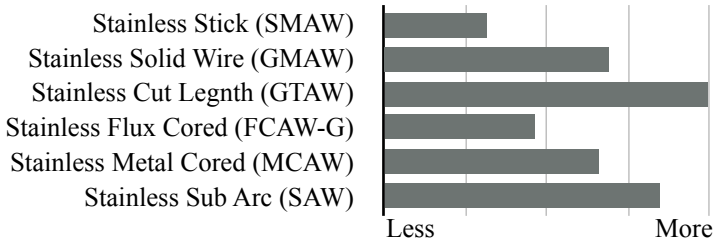
Cost per kilogram referencing commercial selling prices for each electrode type.

Spatter Levels



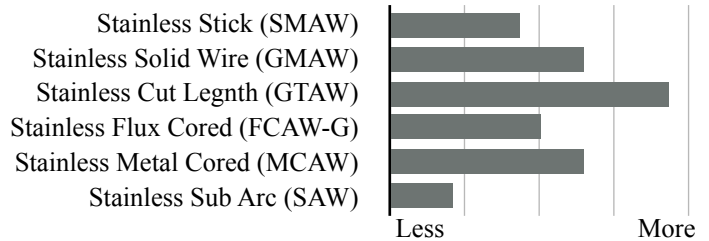
Some processes, like SMAW, by nature have a tendency to produce more spatter than other processes such as GTAW welding or SAW.

Equipment Complexity



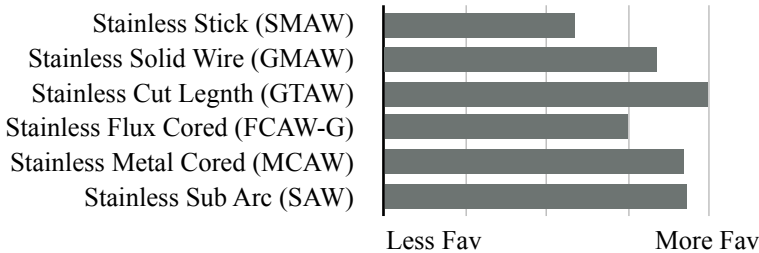
GTAW, MCAW and GMAW equipment that have pulse capability have more input variables and can be more complex than a process using a constant current (CC) or constant voltage (CV) power source.

Skill Level Required



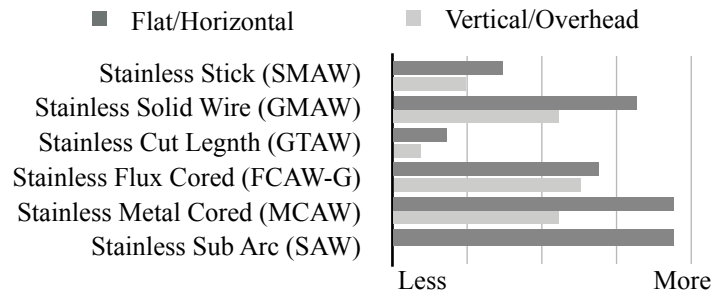
The key to success in all welding joints is proper set up. However, some welding processes are difficult to master than others. For this reason, GTAW requires the most skill.

Bead Appearance



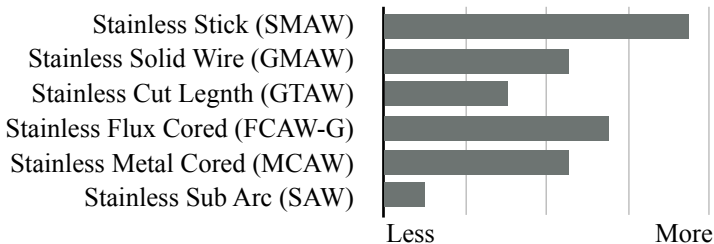
Due to its high surface sheen, most stainless steel welds are required to blend well into the base material. GTAW accomplishes this, but is very slow.

Productivity



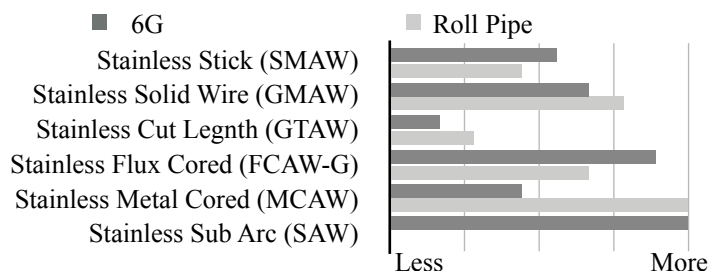
The productivity scale is comparing the kilos per hour of weld metal deposited.

Probability/Outdoor Use



Processes relying on external shielding gas such as GTAW and GMAW are less suited for portable use than SMAW. While submerged arc welding could be implemented outdoors, the setup does not make it very portable.

Pipe Welding Productivity



6G position requires all-position capable electrodes and will by nature have lower deposition rates. Roll pipe applications position the weld so that it is always in the flat position to maximise productivity and deposition rates.

